

CLAIMS

1. A shelf lift system comprising: a support bracket, a first and a second pivot coupled to the bracket, first and second bars respectively coupled to the first and second pivots for movement relative to the support bracket, a shelf support coupled to the first and second bars for movement with the bars relative to the bracket between an upper and a lower position, one of the first and second bars including an stop contact portion, and a cushion fixed to the support bracket at a position to intercept the bar stop contact portion when the shelf support moves to the lower position.
2. The shelf lift system of claim 1 wherein the cushion is fixed between the first and second pivots.
3. The shelf lift system of claim 1 wherein the stop contact portion comprises an end portion of one of the bars extending from one of the first and second pivots away from the shelf support.
4. The shelf lift system of claim 1 further comprising a biasing member having a first end coupled to the support bracket and a second end coupled to one of the first and second bars applying a force there between, said cushion being generally situated along a line between the first and second ends of the biasing member when the shelf support is in the upper position.
5. The shelf lift system of claim 4 wherein the first and second ends of the biasing member are situated in an over-center relationship with respect to at least one of the first and second pivots when the shelf support is moved to the lower position, so that the bar stop contact portion is biased into contact with the cushion.
6. The shelf lift system of claim 4 further comprising a tension adjustment member coupled to the biasing member for adjusting the force applied by the biasing member.

7. The shelf lift system of claim 6 wherein the tension adjustment member comprises a tension adjustment plate coupled to the biasing member and to one of the first and second bars to permit changes in length of the biasing member.
8. The shelf lift system of claim 1 further comprising a latch coupled to the shelf support and a latch pin coupled to one of the first and second bars at a position that permits engagement of the latch pin and latch when the shelf support is in the upper position.
9. The shelf lift system of claim 8 further comprising a latch release lever coupled to the latch to facilitate release of the latch from the latch pin, and a latch biasing member coupled to the latch to bias the latch toward engagement with the latch pin.
10. The shelf lift system of claim 9 further comprising lever mounting pins for movably mounting the latch release lever to the shelf support, the lever including a handle facilitating movement of the latch release lever and latch relative to the shelf support.
11. A shelf lift system comprising: a support bracket, a first and a second pivot coupled to the bracket, first and second bars respectively coupled to the first and second pivots for movement relative to the support bracket, a shelf support coupled to the first and second bars for movement with the bars relative to the bracket between an upper and a lower position, a biasing member having a first end coupled to the support bracket and a second end, a tension adjustment plate coupled to the second end of the biasing member and pivotally coupled to a component of the shelf lift system for movement relative to the support bracket to provide an adjustable biasing force on the shelf support, and a fastener for securing the tension adjustment plate to the component at a selected position.
12. The shelf lift system of claim 11 further comprising a latch coupled to the shelf support and a latch pin coupled to the second bar at a position

that permits engagement of the latch pin and latch when the shelf support is in the upper position.

13. The shelf lift system of claim 12 further comprising a latch release lever coupled to the latch to facilitate release of the latch from the latch pin, and a latch biasing member coupled to the latch to bias the latch toward engagement with the latch pin.

14. The shelf lift system of claim 13 further comprising lever mounting pins for movably mounting the latch release lever to the shelf support, the lever including a handle facilitating movement of the latch release lever and latch relative to the shelf support.

15. The shelf lift system of claim 11 further comprising a cushion fixed to the support bracket between the first and second pivots to intercept a stop contact portion of one of the bars when the shelf support moves to the lower position.

16. The shelf lift system of claim 15 wherein the stop contact portion comprises an end portion of one of the bars extending from one of the first and second pivots away from the shelf support.

17. A shelf lift system for use in a cabinet having a top surface and a pair of sidewalls defining a space below the top surface, the shelf lift system comprising a pair of support brackets, each bracket having a mounting surface to be fixed to one of the sidewalls, a first and a second pivot coupled to each bracket, a swingable linkage including first and second bars respectively coupled to the first and second pivots of each bracket for movement relative to each support bracket, shelf supports coupled to each first and second bars and supporting a common shelf for movement of the shelf with the bars relative to the brackets between an upper position wherein a shelf is situated generally coplanar with the cabinet top surface and a lower position wherein the shelf is situated fully within the cabinet below the top surface, biasing members having first ends

coupled to one of the support brackets and second ends, a tension adjustment plate coupled to the second end of each biasing member and pivotally coupled to one of the first and second bars, a fastener to secure each adjustment plate at a selected position to provide a biasing force on each shelf support aiding in movement of the shelf between the upper and lower positions, latches coupled to the shelf supports and latch pins coupled to one of the first and second bars at a position permitting engagement of the latch pin and latch when the shelf is in the upper position, a latch release lever coupled to the latch to facilitate release of each latch from any engaged latch pin to allow the shelf to move to the lower position, and cushions fixed to each support bracket at a position to intercept a stop contact portion of one of the bars when the shelf support moves to the lower position.